TRIAD OF GROUND FIRES

With the increased range and speed of the Expeditionary Fighting Vehicle and the MV-22 Osprey tilt rotor aircraft, the breadth and depth of the battlefield is increasing immensely. Consequently, the Marine Corps must have weapons systems with correspondingly greater range, lethality, and tactical mobility than those previously available. A triad of indirect fire-support programs is moving the Marine Corps in that direction.

The first element of the triad is the M777 Lightweight 155mm towed howitzer, which began replacing the current M-198 howitzer in 2005. The M777A1 is a joint Marine Corps-Army effort that will meet or exceed all the requirements of the current system, while reducing its weight from 16,000 to 9,800 pounds. The M777A1's maximum range is 15 miles using unassisted projectiles, or 18 miles using assisted projectiles.

The second element of the triad is the High Mobility Artillery Rocket System (HIMARS). The HIMARS delivers high volumes of long range rocket artillery in support of the ground scheme of maneuver. The HIMARS provides accurate, responsive, general support to reinforce fires at long range, under all weather conditions, and throughout all phases of combat operations ashore. Capable of firing the Multiple Launch Rocket System Family of Munitions, the HIMARS fires both precision and area munitions, and is capable of ranges exceeding 36 miles. The third system of the land-based fire support triad, the Expeditionary Fire Support System (EFSS), can accompany the Marine Air Ground Task Force (MAGTF) in any expeditionary mode of operations. It will be the primary indirect fires system for the vertical assault element of the ship-to-objective maneuver force. The EFSS will be internally transported by CH-53 helicopter or MV-22 tilt rotor to allow the greatest range and flexibility of employment. In addition to acquiring these primary fire support systems, the Marine Corps is developing other key adjuncts to the triad that will enhance the capabilities of the fire support platforms. These programs include sensors such as the Ground Weapons Locating Radar, Target Location Designation Handoff System, and Common Laser Range Finder. Additionally, the Improved Position Azimuth Determining System and development of a modeled, balloon-less meteorological measuring capability will improve location and weather data to ensure first round accuracy. For the M777A1, the Modular Artillery Charge System will reduce the number of propellant types used, and Multi-Option Fuze Artillery will reduce the number of fuses currently in the inventory.

Finally, acquisition of M795 155mm high explosive projectiles and variants will increase the lethality and range of munitions inventory. Ground-based, indirect fires are irreplaceable when forces are joined in close combat. Nothing else is as responsive to the commander's needs, or as reliable. They are not weather-dependent or facility-dependent. As such, they are key components of the reach and lethality of the MAGTF.